Massachusetts Department of Environmental Protection
Bureau of Waste Prevention – Air Quality

LPA-PROCESS (BWP AQ 01)

Limited Plan Application for Process Emission Unit(s)

For process equipment emitting at least 1 ton but less than 10 tons of an air contaminant per consecutive 12-month time period.

Transmittal Number

Facility ID (if known)

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

A. Facility Information

1. Facility Name

2. Street Address

3. City

4. State: MA

5. ZIP Code

6. Standard Industrial Classification (SIC) Code

7. North American Industry Classification System (NAICS) Code

8. List ALL existing Air Quality Plan Approvals, Emission Cap Notifications, and 310 CMR 7.26 Compliance Certifications and associated facility-wide emission caps, if any, for this facility in the table below. If you hold a Final Operating Permit for this facility, you may leave this table blank.

Table 1			
Approval Number(s)/ 25% or 50% Rule/ 310 CMR 7.26 Certification	**Transmittal Number(s) (if Applicable)**	**Air Contaminant (e.g. CO, CO2, NOx, SO2, VOC, HAP, PM or Other)***	**Existing Facility-Wide Emission Cap(s) Per Consecutive 12-Month Time Period** (Tons)

*CO = carbon monoxide, CO_2 = carbon dioxide, NOx = nitrogen oxides, SO_2 = sulfur dioxide, VOC = volatile organic compounds, HAP = hazardous air pollutant, PM = particulate matter, specify if "Other"

B. Equipment Description

Note that per 310 CMR 7.02, MassDEP can issue a Plan Approval only for proposed Emission Unit(s) with air contaminant emissions that are representative of Best Available Control Technology (BACT). See Section D: Best Available Control Technology (BACT) Emissions and the MassDEP BACT Guidance at (link to be determined).

1. Is this proposed project modifying previously approved equipment? ☐ Yes ☐ No

   If Yes, list pertinent Plan Approval(s):

2. Is this proposed project replacing previously approved equipment? ☐ Yes ☐ No

   If Yes, list pertinent Plan Approval(s):

3. Provide a description of the proposed project, including relevant parameters (including but not limited to operating temperature and pressure) and associated air pollution controls, if any:

4. Complete the table(s) below to summarize the details of each Emission Unit being proposed.

Table 2A

Facility-Assigned Identifying Number for Proposed Equipment (Emission Unit No.)	**Description of Proposed Equipment Including Manufacturer & Model Number or Equivalent** (e.g. Acme Coating, Model No. 123AB)	**Air Contaminants**	**Potential Emissions[1], Uncontrolled in Tons per Consecutive 12-Month Time Period[2]**
		PM[3]	
		VOC	
		HAP (Individual)	
		HAPs (Total)	
		CO_2:	
		Other:	

[1] Per 310 CMR 7.02, if the potential emissions, uncontrolled are 10 tons or more per consecutive 12-month time period, MassDEP reserves the right to require the proponent to file a Comprehensive Plan Application for the proposed project.
[2] Potential emissions based on worst case raw material (e.g. coating) using maximum application rate and no air pollution control equipment (see Section F, Record Keeping).
[3] PM includes particulate matter having a diameter of 10 microns or less (PM_{10}) and particulate matter having a diameter of 2.5 microns or less ($PM_{2.5}$).

B. Equipment Description (continued)

Table 2B			
Facility-Assigned Identifying Number for Proposed Equipment (Emission Unit No.)	**Description of Proposed Equipment Including Manufacturer & Model Number or Equivalent** (e.g. Acme Coating, Model No. 123AB)	**Air Contaminants**	**Potential Emissions, Uncontrolled in Tons per Consecutive 12-Month Time Period**
		PM	
		VOC	
		HAP (Individual)	
		HAPs (Total)	
		CO_2:	
		Other:	

Note: If you are proposing more than three Emission Units, complete additional copies of these tables.

Table 2C			
Facility-Assigned Identifying Number for Proposed Equipment (Emission Unit No.)	**Description of Proposed Equipment Including Manufacturer & Model Number or Equivalent** (e.g. Acme Coating, Model No. 123AB)	**Air Contaminants**	**Potential Emissions, Uncontrolled in Tons per Consecutive 12-Month Time Period**
		PM	
		VOC	
		HAP (Individual)	
		HAPs (Total)	
		CO_2:	
		Other:	

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B. Equipment Description (continued)

5. Are you proposing an Air Pollution Control Device (PCD)? ☐ Yes ☐ No

If Yes, complete the table(s) below to summarize the details of each PCD being proposed.

Note: If you are proposing one or more Air Pollution Control Devices (PCDs), you must also submit the applicable Supplemental Form(s). See Page 5 for additional information.

Table 3A

Description of Air Pollution Control Device (PCD) Including Make & Model or Equivalent	**Emission Unit No. Served by PCD**	**Air Contaminant(s) Controlled**	**Capture Efficiency (CE), Percent by Weight** (CE is Presumed to be 100% Based on Permanent Total Enclosure (PTE), 40 CFR 51 Appendix B Method 204)	**Destruction/ Collection Efficiency (DE)** (Percent by Weight)	**Overall Control** (Percent by Weight (CE*DE)/100)
		PM[1]			
		VOC			
		HAPs			
		Other:			

[1] PM includes particulate matter having a diameter of 10 microns or less (PM_{10}) and particulate matter having a diameter of 2.5 microns or less ($PM_{2.5}$).

Note: If you are proposing more than two Air Pollution Control Devices (PCDs), complete additional copies of these tables.

Table 3B

Description of Air Pollution Control Device (PCD) Including Make & Model or Equivalent	**Emission Unit No. Served by PCD**	**Air Contaminant(s) Controlled**	**Capture Efficiency (CE), Percent by Weight** (CE is Presumed to be 100% Based on Permanent Total Enclosure (PTE), 40 CFR 51 Appendix B Method 204)	**Destruction/ Collection Efficiency (DE)** (Percent by Weight)	**Overall Control** (Percent by Weight (CE*DE)/100)
		PM			
		VOC			
		HAPs			
		Other:			

B. Equipment Description (continued)

Supplemental Forms Required

If you are proposing one or more PCDs, you will also need to submit the applicable form(s) below.

If Your Project Includes:	You Must File Form(s):
Wet or Dry Scrubbers	BWP AQ Scrubber
Cyclone or Inertial Separators	BWP AQ Cyclone
Fabric Filter	BWP AQ Baghouse/Filter
Adsorbers	BWP AQ Adsorption Equipment
Afterburner	BWP AQ Afterburner/Oxidizer
Electrostatic Precipitators	BWP AQ Electrostatic Precipitator
Selective Catalytic Reduction	BWP AQ Selective Catalytic Reduction
Sorbent/Reactant Injection	BWP AQ Sorbent/Reactant Injection

C. Stack Description

Complete the table below to summarize the details of the proposed project's stack configuration.

Note: Discharge must meet Good Air Pollution Control Engineering Practice. When designing stacks, special consideration must be given to nearby structures and terrain to prevent emissions downwash and adverse impacts upon sensitive receptors. Stack must be vertical, must not impede vertical gas flow, and must be a minimum of 10 feet above rooftop or fresh air intake, whichever is higher.

Table 4						
Emission Unit No.	**Stack Height Above Ground** (Feet)	**Stack Height Above Roof** (Feet)	**Stack Exit Diameter or Dimensions** (Feet)	**Exhaust Gas Exit Temperature Range** (Degrees Fahrenheit)	**Exhaust Gas Exit Velocity Range** (Feet per Second)	**Stack Liner Material**

D. Best Available Control Technology (BACT) Emissions

Complete the table(s) below to summarize the proposed project's BACT emissions.

Table 5A				
Emission Unit No.	**Air Contaminant**	**BACT Emission Limit in Mass per Unit Time** (Utilizing Overall Control Efficiency from Corresponding Table 3, if Applicable - e.g. Pounds per Hour)	**Proposed Consecutive 12-Month Time Period Emissions Restriction** (Tons)	**Proposed Monthly Emissions Restrictions** (Tons)
	PM[1]			
	VOC			
	HAP (Individual)			
	HAPs (Total)			
	CO_2			
	Other:			

[1] PM includes particulate matter having a diameter of 10 microns or less (PM_{10}) and particulate matter having a diameter of 2.5 microns or less ($PM_{2.5}$).

Table 5B				
Emission Unit No.	**Air Contaminant**	**BACT Emission Limit in Mass per Unit Time** (Utilizing Overall Control Efficiency from Corresponding Table 3, if Applicable - e.g. Pounds per Hour)	**Proposed Consecutive 12-Month Time Period Emissions Restriction** (Tons)	**Proposed Monthly Emissions Restrictions** (Tons)
	PM			
	VOC			
	HAP (Individual)			
	HAPs (Total)			
	CO_2			
	Other:			

D. Best Available Control Technology (BACT) Emissions (continued)

Note: If you are proposing more than three Emission Units, complete additional copies of these tables.

Table 5C

Emission Unit No.	**Air Contaminant**	**BACT Emission Limit in Mass per Unit Time** (Utilizing Overall Control Efficiency from Corresponding Table 3, if Applicable - e.g. Pounds per Hour)	**Proposed Consecutive 12-Month Time Period Emissions Restriction** (Tons)	**Proposed Monthly Emissions Restrictions** (Tons)
	PM			
	VOC			
	HAP (Individual)			
	HAPs (Total)			
	CO_2			
	Other:			

E. Monitoring Procedures

Complete the table below to summarize the details of the proposed project's monitoring procedures.

Table 6

Emission Unit No.	**Type or Method of Monitoring** (e.g. Flow Meter)	**Parameter Monitored**	**Frequency of Monitoring**

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F. Record Keeping Procedures

Complete the table below to summarize the details of the proposed project's record keeping procedures. Proposed record keeping procedures need to be able to demonstrate your compliance status with regard to all limitations/restrictions proposed herein. Record keeping may include, but is not limited to, hourly or daily logs, meter charts, time logs, purchase records, raw material records, etc.

Table 7			
Emission Unit No.	**Parameter** (e.g. Material Usage)	**Record Keeping Procedures** (e.g. Data Logger or Manual)	**Frequency of Data Record** (e.g. Hourly, Daily)

Examples of emissions calculations for record keeping purposes:

- Worst case coating/ink/other contains 6.0 lbs of **VOC**/gallon
- Process application rate = 3.0 gallons of coating /ink/other applied per hour
- Process operates 1,000 hours per consecutive 12-month time period

3.0 gals/hour X 6.0 lbs of **VOC**/gal X 1000 hours per consecutive 12-month time period X 1 ton/2,000 lbs =
9.0 tons of **VOC** per consecutive 12-month time period
-or-
Same process, utilizing 3,100 gallons per consecutive 12-month time period
3,100 gal/year X 6.0 lbs VOC/gal X 1 ton/2,000 lbs = 9.3 tons of **VOC** per consecutive 12-month time period

G. Additional Information Checklist

Attach a specific facility description and the following required additional information that MassDEP needs to process your application. Check the box next to each item to ensure that your application is complete.

☐ Plot Plan

☐ Equipment Manufacturer Specifications (Material Safety Data Sheets, Technical Data Composition Sheets, etc.

☐ Equipment Standard Operating Procedures

☐ Equipment Standard Maintenance Procedures, Including Cleaning Method & Frequency

☐ Calculations to Support This Plan Application

☐ Other (e.g., Roof Plan, Floor Plan, Topographic Map) - Specify:

☐ BWP AQ BACT Form, if not proposing Top-Case BACT

H. Other Regulatory Considerations

Indicate below whether the proposed project is subject to any additional regulatory requirements.

310 CMR 7.00: Appendix A Nonattainment Review, or is netting used to avoid review under 310 CMR 7.00 Appendix A or 40 CFR 52.21? ☐ Yes ☐ No

40 CFR 60: New Source Performance Standards (NSPS)? ☐ Yes ☐ No

If Yes: Which subpart? Applicable emission limitation(s):

40 CFR 61: National Emission Standards for Hazardous Air Pollutants (NESHAPS) ☐ Yes ☐ No

If Yes: Which subpart? Applicable emission limitation(s):

40 CFR 63: NESHAPS for Source Categories – Maximum Achievable (MACT) or Generally Available (GACT) Control Technology ☐ Yes ☐ No

If Yes: Which subpart? Applicable emission limitation(s):

301 CMR 11.00: Massachusetts Environmental Policy Act (MEPA)? ☐ Yes ☐ No

If Yes: EOEA No.:

Other Applicable Requirements? ☐ Yes ☐ No

If Yes: Specify:

Facility-Wide Potential-to-Emit Hazardous Air Pollutants (HAPS): ☐ Major* ☐ Non-Major

*A Major source has a facility-wide potential-to-emit of 25 tons per year or more of the sum of all hazardous air pollutants or 10 tons per year or more of any individual hazardous air pollutant.

Continue to Certification by Responsible Official ►

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Transmittal Number

Facility ID (if known)

I. Certification by Responsible Official

The signature below provides the affirmative demonstration pursuant to 310 CMR 7.02(4)(d)5 that any facility(ies) in Massachusetts, owned or operated by the proponent for this project (or by an entity controlling, controlled by or under common control with such proponent) that is subject to 310 CMR 7.00, et seq., is in compliance with, or on a MassDEP approved compliance schedule to meet, all provisions of 310 CMR 7.00, et seq., and any plan approval, order, notice of noncompliance or permit issued thereunder. This Form must be signed by a Responsible Official working at the location of the proposed new or modified facility. Even if an agent has been designated to fill out this Form, the Responsible Official must sign it. (Refer to the definition given in 310 CMR 7.00.)

I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment.

Responsible Official Name (Type or Print)

Responsible Official Signature

Responsible Official Title

Responsible Official Company/Organization Name

Date (MM/DD/YYYY)

This Space Reserved for MassDEP Approval Stamp.

Continue to Energy Efficiency Evaluation Survey ►

J. Energy Efficiency Evaluation Survey

1. Do you know where your electricity and/or fuel and/or water and/or heat and/or compressed air is being used/consumed? ☐ Yes ☐ No

2. Has your facility had an energy audit performed by your utility supplier (or other) in the past two years?[1] ☐ Yes ☐ No

   a. Did the audit include evaluations for heat loss, lighting load, cooling requirements and compressor usage? ☐ Yes ☐ No

   b. Did the audit influence how this project is configured? ☐ Yes ☐ No

3. Does your facility have an energy management plan? ☐ Yes ☐ No

   a. Have you identified and prioritized energy conservation opportunities? ☐ Yes ☐ No

   b. Have you identified opportunities to improve operating and maintenance procedures by employing an energy management plan? ☐ Yes ☐ No

4. Has each emission unit proposed herein been evaluated for energy consumption including average and peak electrical use; efficiency of electric motors and suitability of alternative motors such as variable speed; added heat load and/or added cooling load as a result of the operation of the proposed process; added energy load due to building air exchange requirements as a result of exhausting heat or emissions to the ambient air; and/or use of compressors? ☐ Yes ☐ No

5. Has your facility considered alternative energy methods such as solar, geothermal or wind power as a means of supplementing all or some of the facility's energy demand? ☐ Yes ☐ No

6. Does your facility comply with Leadership in Energy & Environmental Design (LEED) Green Building Rating System design recommendations?[2] ☐ Yes ☐ No

[1] A facility wide energy audit would include an inspection of such things as lighting, air-conditioning, heating, compressors and other energy-demand equipment. It would also provide you with information on qualifying equipment rebates and incentive programs; analysis of your energy consumption patterns and written cost-savings recommendations and estimated cost savings for installing new, high-efficiency equipment.

[2] To understand the LEED Rating System, it is important to become familiar with its comprising facets. To be considered for LEED New Construction and Major Renovations, a building must meet specific prerequisites and additional credit areas within six categories:

- Sustainable Sites
- Materials and Resources
- Water Efficiency
- Indoor Environmental Quality
- Energy and Atmosphere
- Innovation and Design